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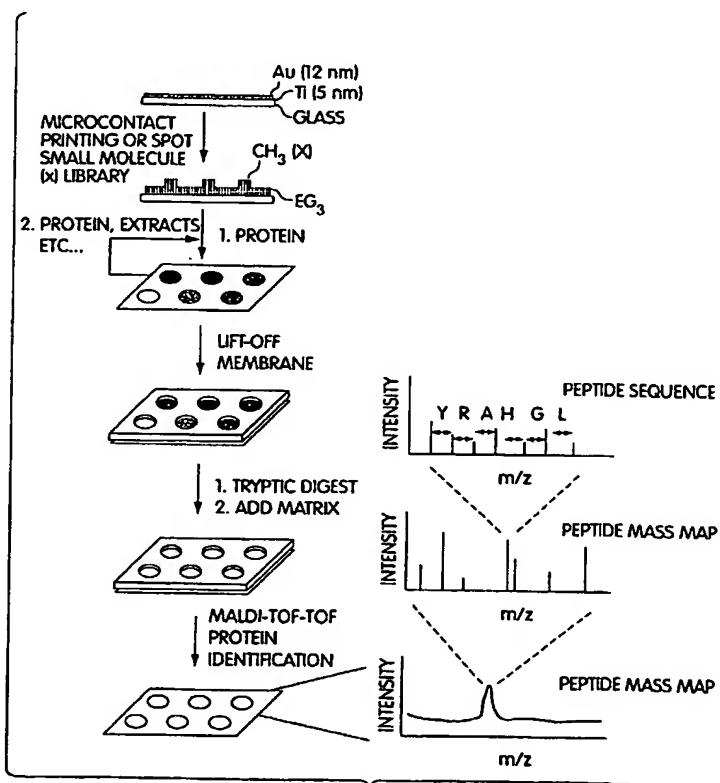
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(54) Title: DETERMINATION OF PROTEINS AND/OR OTHER MOLECULES USING MASS SPECTROSCOPY



(57) Abstract: This invention generally relates to the determination of species such as proteins and/or small molecules on self-assembled monolayers using mass spectrometry. In some cases, the proteins and/or small molecules may be arranged on a substrate in an array, for example, in a microarray. In one set of embodiments, the invention relates to methods for determining proteins and/or small molecules bound to self-assembled monolayers using mass spectroscopy techniques such as MALDI and MALDI TOF techniques. This combination allows, for example, the systematic identification of unknown proteins from cell lysates. Identification of novel interactions can be achieved, in some cases, in instances where the binding partner to a particular target species is unknown. In another set of embodiments, the invention relates to methods of attaching a species to a self-assembled monolayer on a substrate such that the substrate can be used in a mass spectrometer, in some cases without requiring additional exposure of the substrate to water. For example, a target species may be detected and/or analysed using mass spectrometry in the presence of similar or "contaminating" species, without first removing the contaminating species.



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INTERNATIONAL SEARCH REPORT

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>SU JING ET AL: "Using mass spectrometry to characterize self-assembled monolayers presenting peptides, proteins, and carbohydrates." ANGEWANDTE CHEMIE (INTERNATIONAL ED. IN ENGLISH) 16 DEC 2002, vol. 41, no. 24, 16 December 2002 (2002-12-16), pages 4715-4718, XP002313539 ISSN: 0570-0833 the whole document</p> <p style="text-align: center;">-----</p> <p style="text-align: center;">-/--</p>	1-33

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Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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